

# MAJA NYBERG

UX DESIGNER | INTERACTION DESIGN STUDENT

UX Design Portfolio  
Selected Samples

# HELLO, I'M MAJA

I'm a soon-to-be Software engineer, currently pursuing a master's degree in Interaction Design and Technologies at Chalmers University of Technology. My dream is to become a UX designer who by her work makes a difference to people in some way.

I have a wide range of interests including photography, music and coffee. My first job after graduating high school was as a barista, which has left its marks.

In this portfolio you will find a handful of my favourite projects. Neither of them are perfect, but I learned a great deal working on them, and most importantly I had a lot of fun!

/Maja

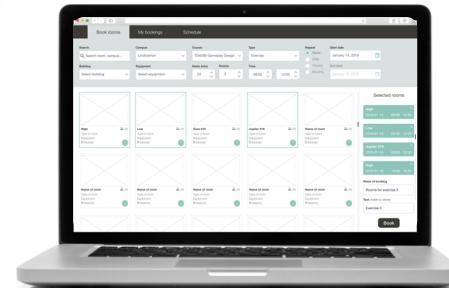


# PROJECTS



BACHELOR  
THESIS

*Spring 2018*



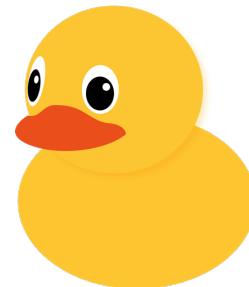
ROOM SCHEDULING  
SYSTEM

*Autumn 2018*



SURVIVING THE  
SWEDISH WINTER

*Autumn 2018*



THE DUCKY  
PROJECT

*Spring 2019*

HOW DO YOU  
WANT TO BE  
REMEMBERED?

REMEMBER  
ME

*Spring 2019*

# #museumgroupie

BACHELOR THESIS

Spring 2018 • iOS app • Group project

## PROBLEM

The task we received was to design and develop an application for documenting museum visits and other public spaces. The specified requirements of the project were that the documentation had to be done in groups to add a collaborative aspect, and that the documentation should be possible to share both locally and on social media.

## MY ROLE

UX/UI Designer - I was responsible for the design, however this project was done before I had studied any course related to design and UX which made it very challenging.

## WHAT I DID

- User research
- Sketching
- Mock ups
- Low-fidelity prototype
- High-fidelity prototype
- Usability testing



# DESIGN PROCESS | ITERATION ONE

The design process can be divided into two different iteration cycles.



## Task definition

- Specified functional requirements
- Decided target group



## Sketching and prototype

- Sketching
- Wireframing
- Marvel app



## Testing and evaluation

- Classmates tested the prototype
- The design was difficult to understand
- The purpose of the app was unclear



## Scrapped the design

### Learnings

In retrospect I know that it would have been very helpful for us to have more knowledge in interaction design methodology (e.g. ideation), user research and prototyping.

We started the project without a clear view of what we actually wanted the application to do. This resulted in a poor design that was difficult to understand, and the final decision was to scrap the design and start over.



# DESIGN PROCESS | ITERATION TWO



## Task definition

- Decided a new target group
- Added functional requirements



## User research

- What apps do the target group use?



## Sketching

- Focus on a quick and easy start up
- Navigation inspired by Snapchat
- iOS guidelines



## Prototyping

- Designs in Illustrator
- Prototype in Marvel App



## Evaluation

- Tested by kids at Universeum

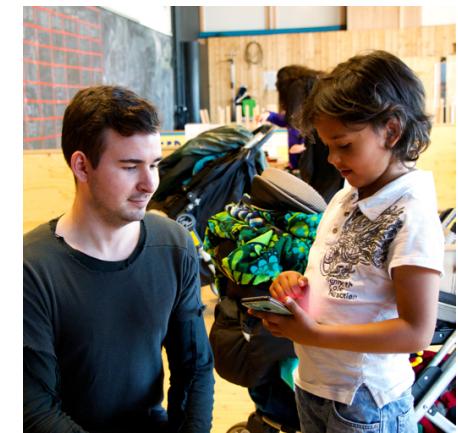


## Final design

- Changes based on the test results

## Design iteration two

In the second design iteration we used our learnings from the first iteration, which resulted in a design customized for children between 9-13 years old. Using the app, the children could experience the museum Universeum through collaborative photography missions.



# FINAL DESIGN

**Skapa grupp**

**Gå med i grupp**

**Visa QR-koden för dom som ska vara med i din grupp!**

**Klar**

**Skanna en QR-kod för att gå med i en grupp!**

**Vad är ditt namn?**

**OK**

**UPPDAG**

- Vattnets väg
- Akvariehallen
- Regnskogen
- Rymden
- Hälsa

**MIN GRUPP**

- Alexandra
- Josefin
- Sebastian

**Visa QR-kod**

**Byt grupp** **Lämna grupp**

**BILDER**

**UPPDAG - DROPPA**

- 1 Ta ett kort på fiskar!
- 2 Ta ett kort på en mun!
- 3 Ta ett kort upp bland träden!

?

**Klar**

**UPPDAG - DROPPA**

- 1 Ta ett kort på fiskar!
- 2 Ta ett kort på en mun!
- 3 Ta ett kort upp bland träden!

Andreas

**Klar med uppdrag!**

**UPPDAG - DROPPA**

**Gör om uppdrag!**

# ROOM SCHEDULING SYSTEM

TDA493 GRAPHICAL INTERFACES

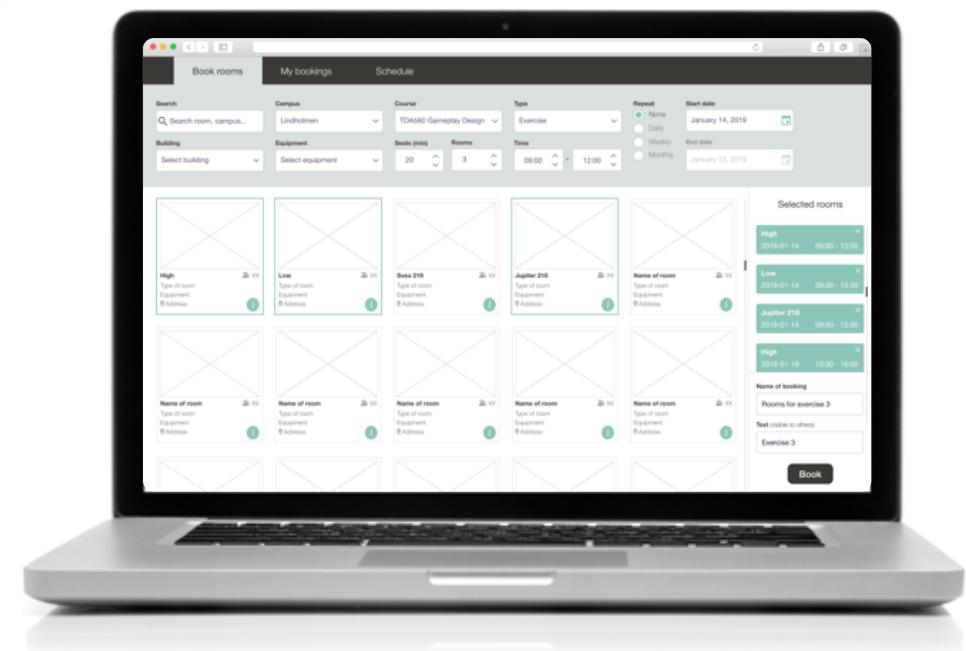
Autumn 2018 • Website • Individual project

## PROBLEM

The task was to design a system for scheduling and room booking, similar to e.g. TimeEdit. The domain area of the project was room booking and scheduling in the context of a university. This included everything between booking a small group room for a one hour meeting to scheduling an entire course, lasting for eight weeks. This was the first individual project in the master program, which implied new challenges.

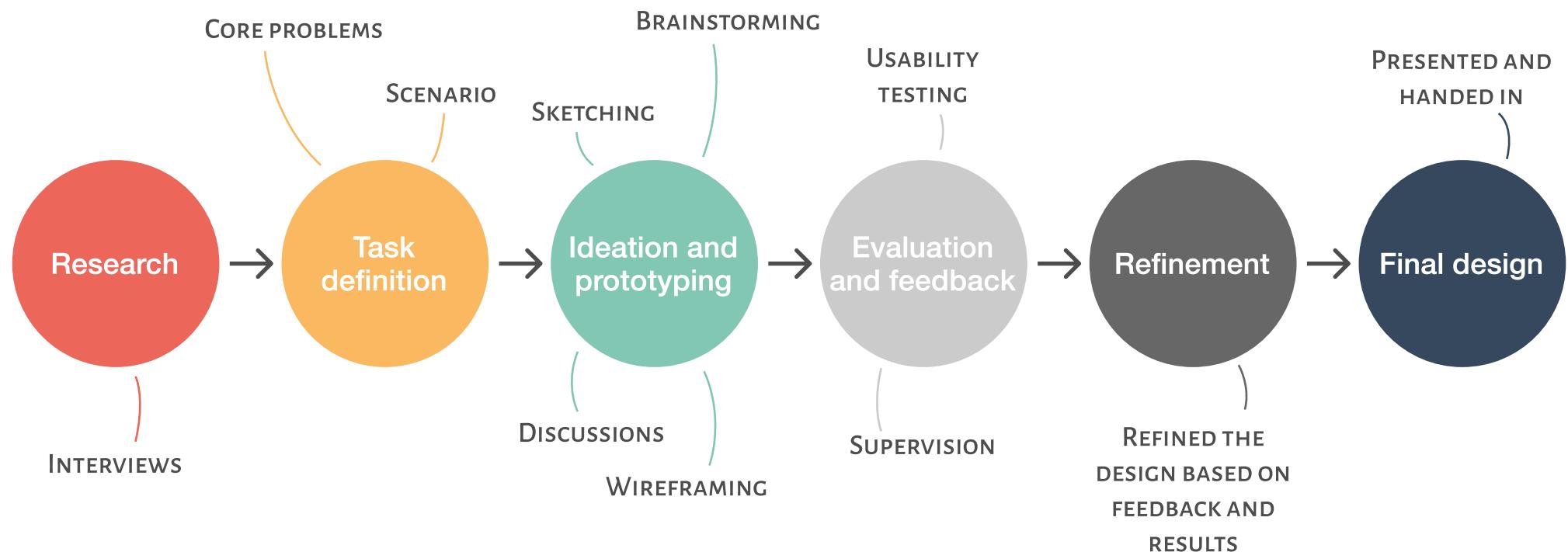
## WHAT I DID

- Interviews
- Scenarios
- Low-fidelity prototypes
- Wireframes
- Usability testing



# DESIGN PROCESS

A short summary of the design process.



# RESULTS

The final design which was presented in the end of the course.

## Book rooms

The start page for teachers. There are three tabs to navigate between the three major activities - Book rooms, My Bookings and Schedule. The teacher can use the search bar and dropdown menus to filter out an appropriate room.

The teacher books rooms by clicking on the wanted rooms, and then confirming the booking on the right side of the screen.

## Pain point

The most popular (frequently booked) rooms might not be the best rooms. It was shown in the interviews that teachers have the tendency to book rooms that they have close-by, that they are already familiar with. How could I make the interface nudge the teachers to explore other opportunities?

This screenshot shows a list of bookings for the course TDA490 Gameplay Design on January 14, 2019, from 09:00 to 12:00. The bookings are for High, Low, Jupiter 218, and Omega rooms. The interface includes a search bar, dropdown menus for filtering by date, time, room, name, course, type, and text (visible to others). A map of the campus is visible on the right.

This wireframe illustrates the booking process. It shows a search bar, filters for campus, course, type, repeat, and start date, and a grid of room options. Each room card displays its name, type, equipment, address, and a small icon. On the right, a sidebar shows a summary of the booking details and a 'Book' button.

# RESULTS

The final design which was presented in the end of the course.

## My bookings

The teacher can click on a booking to see more details, edit and delete the booking.

The screenshot shows a web-based room scheduling system. At the top, there are three tabs: 'Book rooms', 'My bookings' (which is selected), and 'Schedule'. Below the tabs is a search bar with placeholder text 'Search room, campus...'. There are also filters for 'Date', 'Time', 'Rooms', 'Name', 'Course', 'Type', and 'Text (visible to others)'. A dropdown menu shows 'Recently deleted'. The main area displays a list of bookings:

Date	Time	Rooms	Name	Course	Type	Text (visible to others)
January 14, 2019	09:00 - 12:00	High	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3
January 14, 2019	09:00 - 12:00	Low	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3
January 14, 2019	09:00 - 12:00	Jupiter 21B	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3
January 16, 2019	13:00 - 16:00	High	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3
January 16, 2019	10:00 - 12:00	Omega	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3
January 16, 2019	08:00 - 10:00	Windows	Rooms for exercise 3	TDA480 Gameplay Design	Exercise	Exercise 3

Below this, a specific booking for 'Windows Seminar room' on January 16, 08:00 - 10:00 is shown in detail:

Date	Time	Course	Room	Name	Type
January 16, 2019	08:00 - 10:00	TDA480 Gameplay Design	Windows Seminar room Whiteboard - Projector 20 Lindholmstplatsen 1, Kuggen	Rooms for exercise 3	Exercise

A 'Save' button is visible at the bottom right of this detail view.

## Edit booking

When editing the bookings, the details are shown in editable dropdowns and textfields. The user can edit the booking, but can only choose times, date etc that are still available for the booked room.

The screenshot shows the 'Edit booking' interface. It features a form with fields for 'Date', 'Time', 'Course', 'Room', 'Name', 'Text (visible to others)', and 'Type'. The 'Room' field includes a map of the building layout. A note at the bottom left says 'The room is occupied during this time.' A 'Save' button is located at the bottom right.

## Possible improvement

Being able to edit a package of bookings - e.g. if a teacher has booked the wrong rooms on all Wednesdays and Tuesdays for an entire course, it would be easier to edit them all at the same time.



# RESULTS

The final design which was presented in the end of the course.

## Schedule

This screenshot shows a weekly schedule grid for January 2019. The columns represent days from Monday to Sunday, and the rows represent hours from 8 to 19. Various booking entries are displayed across the grid, each with a color-coded background and descriptive text. For example, on Tuesday, there is a booking for 'Windows meeting' at 8:00. On Friday, there are multiple bookings for 'TDA493 Graphics Interfaces Supervision' at different times. The interface includes a search bar at the top and navigation controls for dates.

## Possible improvement

Add day view, not only week view.



## Delete booking

When the user has deleted a booking, it is possible to restore the booking within the next 15 minutes by using the 'Recently deleted' dropdown.

This screenshot shows the 'Recently deleted' dropdown menu in the Room Scheduling System. It lists recent bookings that have been deleted, including their details such as date, time, room name, course, and type. The menu also includes a 'Click to restore' button for each entry. The interface includes a search bar and various filtering options for the list.

# SURVIVE THE SWEDISH WINTER

TDA580 GAME PLAY DESIGN

Autumn 2018 • Board game • Group project

## TASK

As an exercise in the course Game play design we were to design and create our own board game.

## MY ROLE

Designer

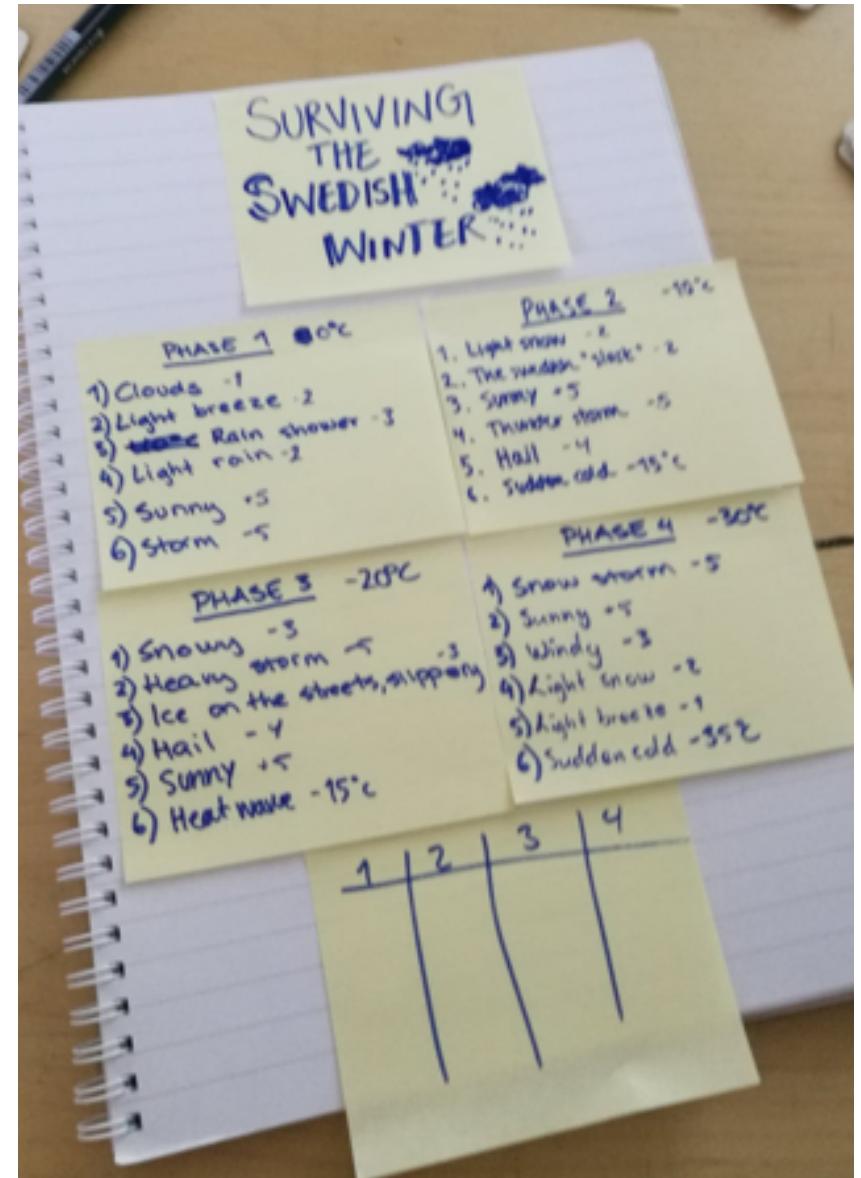
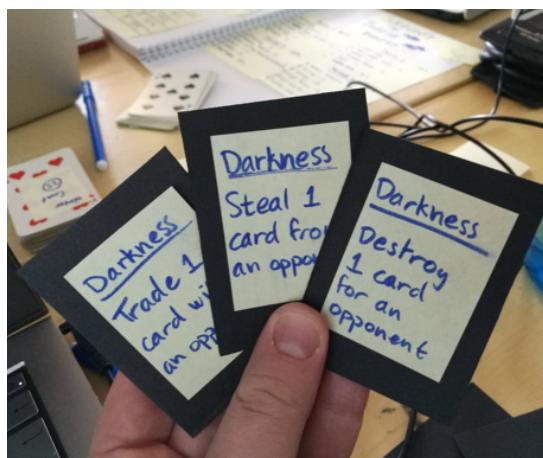
## WHAT I DID

- Rapid prototyping
- Paper prototyping
- Models using different tools and methods
- Graphical design
- User testing



## RAPID PROTOTYPING

Our first session working with this game, we sat down created a rapid paper prototype and tried to develop the mechanics and dynamics of the game. We decided that the game should be set during a really harsh Swedish winter. The inspiration came from classmates originating from countries outside of Scandinavia who were shocked when winter came and they realized how dark it is here in Sweden.



# CORE GAMEPLAY

After rapid prototyping we decided on the core mechanics and dynamics of the game, to design the game's rules.

## Concept

The game is set during a really harsh Swedish winter. The players are tourists who travel with their travel guide from the south of Sweden to the north and the famous tourist spot called Treriksröset. Since it's winter the weather outside is really cold and gets colder the further north the tourists go.

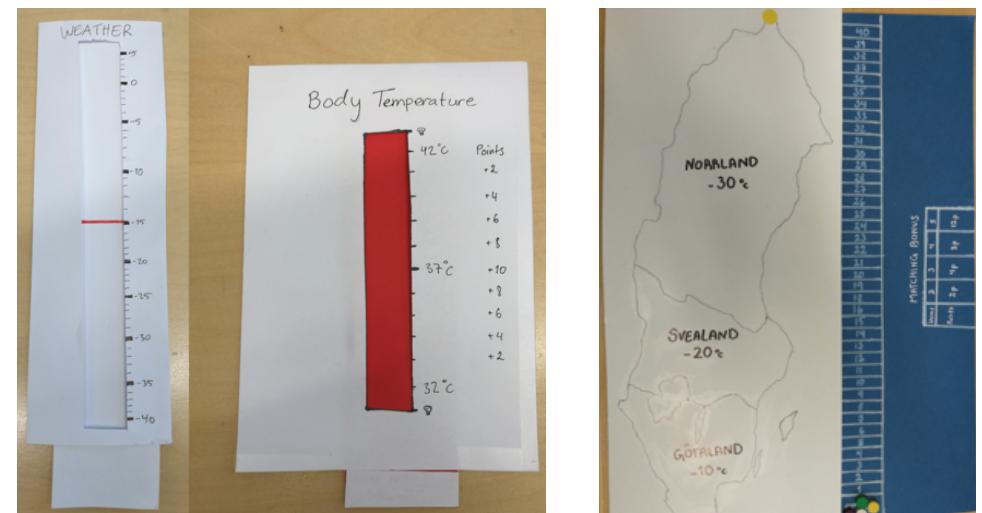
To survive the harsh weather the tourists have to dress accordingly. If they get too warm or too cold they will die. To put on clothes, the tourists play *clothing cards* from their hand to try to negate the temperature outside. Example of such cards are sunglasses (worth 1°C) and jackets (worth 10°C).

The game is made up of three rounds. Each round the players get a new set of *clothing cards*. The first round is in Götaland at -10°C, the second in Svealnad at -20°C and the final round in Norrland at -30°C. Each round one *weather card* is drawn, and will either decrease or increase the temperature. After the *weather card* is drawn each player gets to draw one *event card* each which will affect the players individually. It could for example be a hug or fika worth 2°C.

Once the *weather card* and all *event cards* are drawn, the players should add up the temperatures from the current region, the weather and event cards, and use the *clothing cards* on hand to defend themselves towards the temperature.



The different clothing cards.



Thermometers to keep track of the regions temperature, and each player's temperature.

Game board.

# THE DUCKY PROJECT

CIU180 TANGIBLE INTERACTION

*Spring 2019 • Smart bathtub set-up • Group project*

## TASK

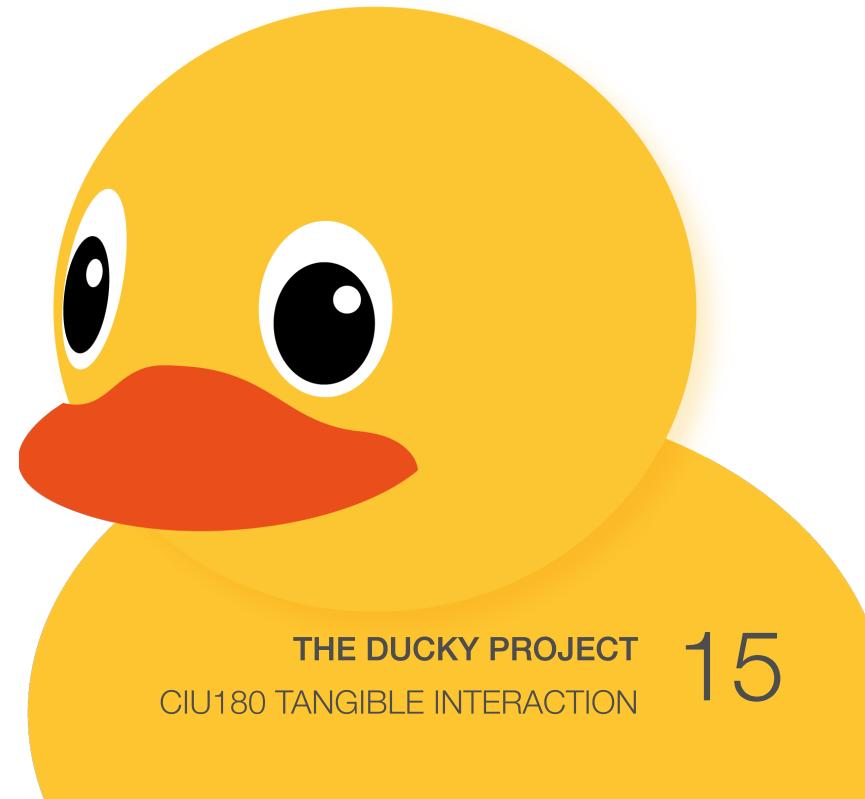
Create a tangible user interface that controls a bathtub, with an assisting rubber duck that will facilitate the bathing preparation experience.

## MY ROLE

Designer and developer

## WHAT I DID

- Graphical design
- Programming arduino
- Connecting and drawing circuits
- Soldering
- Scenario



## CONCEPT

The Ducky Project consists of two parts - the bathtub and the ducky container. The user can prepare the bathtub by modifying the ducky container. This can be done anywhere, not necessarily in the bathroom, since the bathtub and the ducky container are connected via WiFi .

### Water level

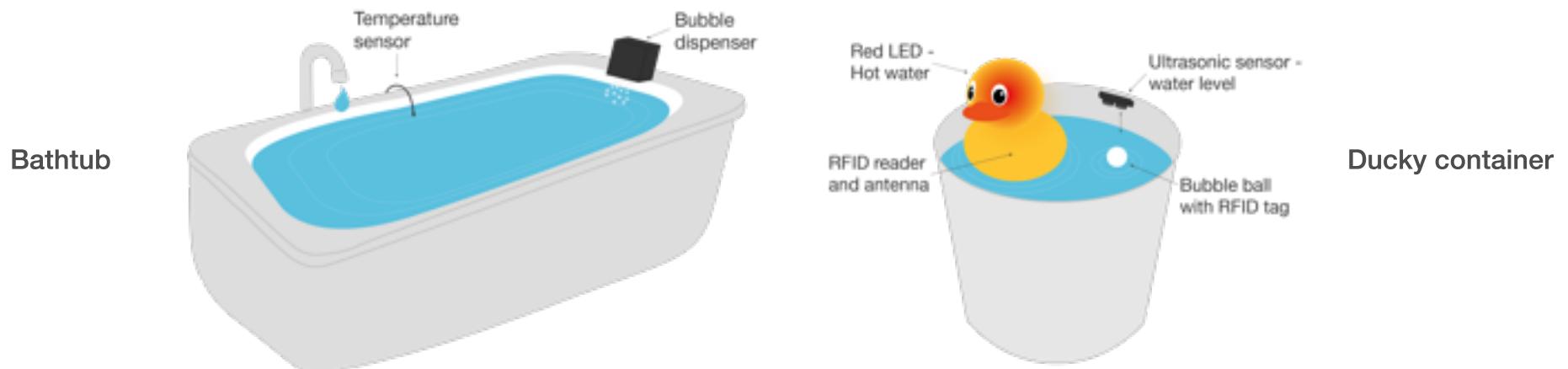
The user determines the desired water level in the bathtub by pouring water into the ducky container - if the user fills half of the ducky container, half of the bathtub will be filled.

### Temperature

The rubber duck shows if the temperature of the water in the bathtub is hot or cold by lighting up a red LED for hot or a green LED for cold.

### Bubbles

The user can place the bubble ball on the back of the rubber duck to fill the bath with bubbles.



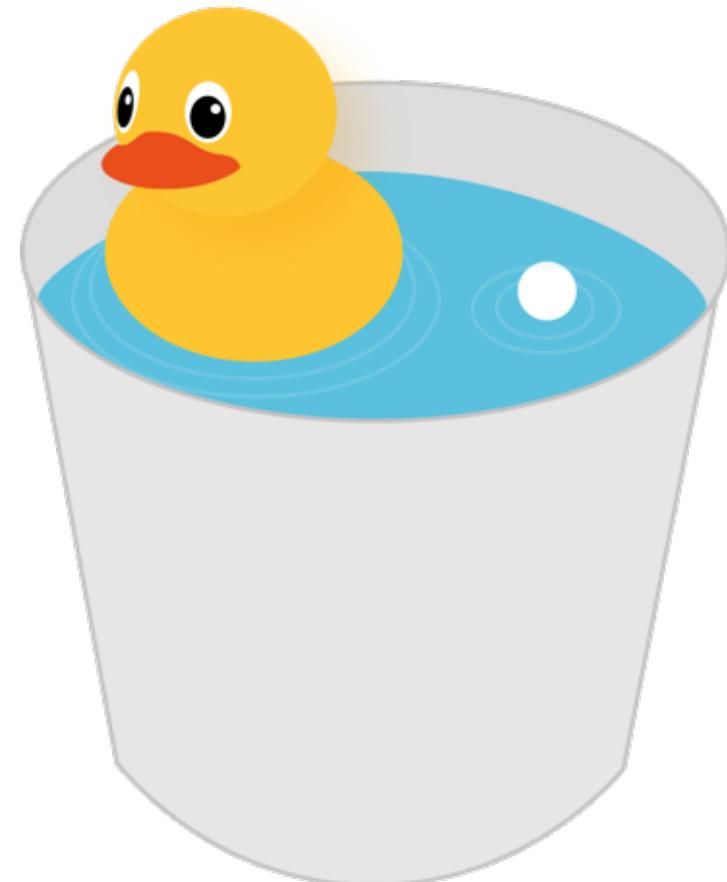
# USE CASES AND SCENARIO

## Use cases

- As a user I want to be able to check if the water is hot or cold.
- As a user I want to be able to control the level of water in the tub without being in the bathroom.
- As a user I do not want to worry about water overflowing from the tub.
- As a user I want to be able to add bubbles to my bathtub.
- As a user I want to be able to prepare a bath, without being in the bathroom.

## Scenario - Kim the kid

Kim does not want to take a bath. To make the experience more fun Kim's parents have bought the Ducky Project. They place the ducky in the accompanying container and fill it halfway with water - they can hear that the bathtub starts filling up! When they add a small ball to the container, bubbles are dispensed to the bathtub, how fun! Now Kim wants to take a bath!



# PROTOTYPE

## Water level

The water level of the ducky container is read by an ultrasonic sensor, which determines if the ducky container is half-filled, or filled to its full capacity. When the ducky container is filled to the desired level, the bathtub will be filled to the same level by a pump.

## Temperature

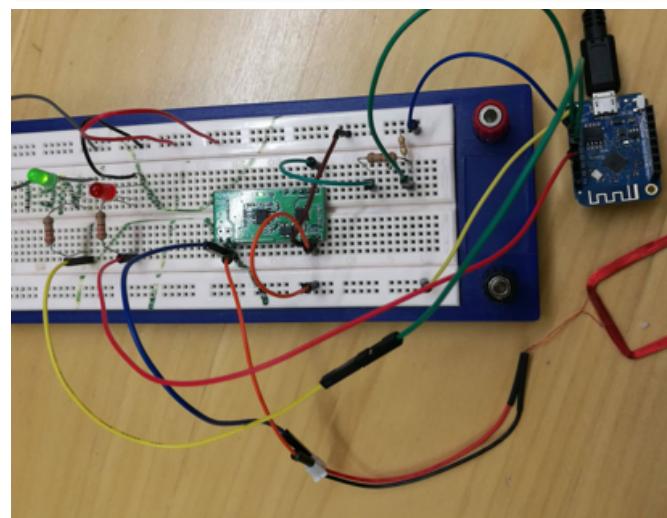
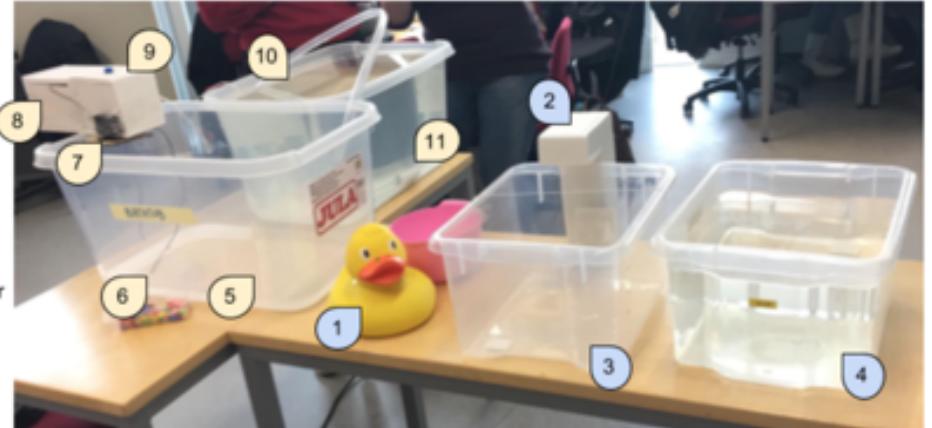
The temperature of the water in the bathtub is read by a temperature sensor and then displayed by lighting up a red or green LED - red for hot, green for cold.

## Bubbles

The bubble ball is a ping pong ball containing an RFID-tag and the ducky itself contains an RFID reader and antenna. The RFID-tag is scanned by placing the bubble ball on the back of the rubber duck. This action sends a message to a dispenser on the bathtub that will provide bubbles in the bath.

The Ducky Container  
1. Rubber Ducky  
2. Ultrasonic Sensor  
3. Ducky Container  
4. Water Reserve

The Bathtub  
5. Bathtub  
6. Temperature Sensor  
7. Servo Motor  
8. Electronics Housing  
9. Bubble Bath Dispenser  
10. Water Reserve  
11. Submersible Pump



# REMEMBER ME

DAT157 DESIGNING USER EXPERIENCES

*Spring 2019 • Critical design • Individual project*

## TASK

The task was the most open task we had received so far during the master programme. We were to design something of our choice.

- The design had to evoke a distinct user experience or emotion
- The design had to be digital and interactive in some sense
- The design had to touch upon at least one of the following themes
  - Critical design - serves as an eye-opener or a changer of behaviour
  - Speculative design - raises questions and concers in regards to upcoming technology
  - Spatial/temporal dimensions

## WHAT I DID

- Interviews
- Research
- Sketching
- Wireframing
- User testing

HOW DO YOU  
WANT TO BE  
REMEMBERED?

## DEFINING THE TASK

Our teacher repeatedly said in the beginning of the project that we should choose a theme or topic that meant something to us. It could be something that made us happy, sad or angry. It could be some injustice in the world that we strongly wanted to change. It could be whatever - as long as we cared about it.

I knew early in the process that I wanted to evoke a negative emotion. In previous projects we had always aimed to make the design as easy and comfortable as possible for the user, I believed it would be very interesting to do the exact opposite.

I started by discussing the wheel of emotions with a few colleagues. When was the last time we felt the emotion, and why - why was the emotion evoked? Together we created an Affinity diagram with possible topics and emotions. The topics I believed would be the most rewarding to me were online bullying, imposter syndrome, death and mental health.

After researching the different topics - watching TED talks, reading blogposts and watching youtube videos - I finally decided that death would be the most challenging and interesting topic for me. I spent a lot of time thinking about my grandparents who passed away when I was a kid. By then I understood that this project would on a personal level be the toughest one I had ever done. Which meant I had to do it.



# RESEARCH AND PROJECT PURPOSE

## Research

I started by talking to people about death and asked all the uncomfortable and honest questions I could come up with.

*Have you thought about death? Have you thought about how you want to be remembered, when you are no longer around?*

The most common answer was that no, they had not thought about death. They had not thought about what they wanted to do in case they got sick or in case they could no longer be independent.

People got a little bit struck when I asked them how they wanted to be remembered (similar to the people in this beautiful video\*). But they knew - they wanted to be thought of as good people. Kind, helpful and caring.

## Problem statement

When talking to people about death, I was touched by the stories of how people wanted to be remembered. They were so pure and honest - as if the purpose of life was drilled down to its smallest elements. It struck me that however beautiful a memory can be, everyone does not get to choose how they should be remembered - often due to some disease or dementia that is out of their control. I decided that this should be the focus of my project - how everyone does not get to decide how they will be remembered.



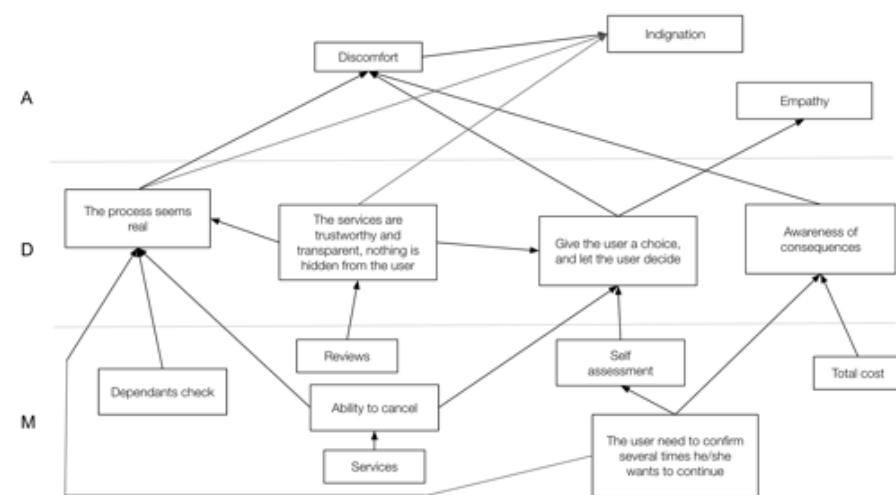
\*[https://www.youtube.com/watch?v=\\_nVrpF9sbdu](https://www.youtube.com/watch?v=_nVrpF9sbdu)

# CRITICAL DESIGN AND NEGATIVE EMOTIONS

I had from the beginning decided I wanted to evoke negative emotions, to challenge myself. Since death can be interpreted as a rather dark theme, I felt that I needed guidance in this uncomfortable and personally demanding theme.

In literature I found advice in how to use critical design and how to find an appropriate tone for this dark theme. The key takeaways were that the users should interpret the product or situation as real, that a narrative can be useful to situate the user, and that uncomfortable interactions are helpful to demand a deep personal commitment and to promote empathy as well as respect.

The three emotions: discomfort, indignation and empathy were my final decisions in what emotions I wanted to evoke. Based on my user research and knowledge in critical design I created a MDA-model visualizing the relationships between the different aspects of my idea to understand it better.



"In critical design, it's vital for the user to experience a dilemma and to carry somethings of a burden of interpretation"  
Malpass, 2015

"They seem real but there is something not quite right"  
Malpass, 2015

"The law of apparent reality  
- Emotions are elicited by events appraised as real, and their intensity corresponds to the degree to which this is the case"  
Fridja, 1988

"A narrative is established to situate the object. Questions are raised in the difference between 'reality' and the materiality proposed through the object and its narrative of use"  
Malpass, 2015

"We propose that uncomfortable interactions may help establish an appropriate tone for engaging with dark themes, demanding a deep personal commitment, reducing the risk of trivialisation, and in turn, promoting empathy and respect"  
Benford et al, 2012

## USER TESTING, RESULT AND PERSONAL REFLECTIONS

Trying to evoke negative feelings related to death was an emotionally tough exercise, since the feelings I wanted to evoke in the users also evoked in me.

The final result was a website providing accident services where I used a narrative to create a personal connection between the reader and the product. I tried to make the website as trustworthy and real as I could, but with a content that would give people the shivers.

When testing the design on classmates and friends, the result showed that my design was successful. People felt many negative emotions when using the website. The only somewhat positive emotion was empathy, which gave the website a beautiful but sad atmosphere.

This is the project I am the most proud of because it is so different, with a really tough and sensitive topic. I grew on a personal level while doing this project, because I had the privilege to talk to so many people about death, the meaning of life, and what was important to them.

At the same time this is the project I am the most scared to show since death is such a sensitive subject. I can not know what the person reading this has gone through, or what death can evoke in that person. Therefore, I have on purpose not shown any sketches or wireframes in this portfolio out of respect.

“It felt real and a bit terrifying”

“It gave me the shivers”

“The website was trustworthy which made it even more uneasy”

“I feel more fear of dying, but still empathy for the people who wants to”

“I felt disgusted at many times and wanted to not continue, but at the same time I was intrigued and wanted to see where it would lead”

**THANK  
YOU**

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Selected Samples**